

Work Order ID 120672

June-10-14 9:49:28 AM

646.3301
B120672
REV-N/C

120672

Page 1

Item ID: 646.3301

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Upper Cutter Assy

Start Date: 6/10/14 Start Qty: 3.00

3

Cust Item ID:

Required Date: 6/11/14 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals: Process Plan: MLS Date: 1406-10 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
646.3300	N/C

110 Pick Kit 0.00

110

Packaging

Memo

0.00

Packaging

3

DAS
41
9-89

14-9-20

120 0.00

120

Small Fab

Memo

0.00

Small Fab

Two fastener must be install finger-tight (see note 9)

3

DAS
41
9-89

14-9-22

Assemble as per dwg and apply loctite 598 on all faying surfaces shown on dwg per note 7.

A/R RTV LOCTITE 598: 125540
exp. date: 5/15

AS 350

Work Order ID 120672

120672

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Item ID: 646.3301 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Upper Cutter Assy
 Start Date: 6/10/14 Start Qty: 3.00 *3* Cust Item ID:
 Required Date: 6/11/14 Req'd Qty: 3.00 *3* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89 14-9-22
130						3			
QC	Memo	0.00							
Quality Control									
140	Identify as per dwg & Stock Location. CCH	0.00							DAS 32 9-89
140							14/9/23	3	
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV***								
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.00							
Quality Control									

ML5 140923
 14-a-23

Picklist Print

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Page 1

Work Order ID: 120672

120672

Parent Item: 646.3301

646 3301

Parent Item Name: Upper Cutter Assy

Start Date: 6/10/14

Required Date: 6/11/14

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP REV:A 12.10.19 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.3310 *646 3310* LH Half		Manufactured	No			110	Each	9.0000	1	3			
									**			DAS 41 9-89	14-9-20
					120853					3			
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					CA			9					
					108495			4					
					109916			5					
646.3311 *646 3311* RH Half		Manufactured	No			110	Each	22.0000	1	3			
									**			DAS 41 9-89	14-9-20
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					CA			22					
					100844			6					
					102840			8		1			
					107606			6					
					108423			2		2			
646.3312 *646 3312* Center Plate		Manufactured	No			110	Each	10.0000	1	3			
									**			DAS 41 9-89	14-9-20
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					CA			10					
					103083			4		1			
					103686			2					
					108244			4					
					121184					2			

Picklist Print

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Work Order ID: 120672

120672

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 6/10/14

Required Date: 6/11/14

Start Qty: 3.00

Required Qty: 3.00

646.3313 Manufactured No

110 Each 18.0000 1 3

DAS

646.3313

41

9-89

14-9-20

Upper Guide

Location

Loc Qty

Loc Code

CA

18

106094

2

109917

16

3

646.3314 Manufactured No

110 Each 10.0000 1 3

DAS

646.3314

41

9-89

14-9-20

Blade

Location

Loc Qty

Loc Code

CA

10

108506

1

116347

9

3

646.3315 Manufactured No

110 Each 2.0000 1 3

DAS

646.3315

41

9-89

14-9-20

Blade

Location

Loc Qty

Loc Code

CA

2

107680

2

3

646.3316 Manufactured No

110 Each 14.0000 1 3

DAS

646.3316

41

9-89

14-9-20

Blade

Location

Loc Qty

Loc Code

CA

14

103515

2

116486

12

3

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Work Order ID: 120672

120672

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 6/10/14

Required Date: 6/11/14

Start Qty: 3.00

Required Qty: 3.00

NAS1149FN832P

Purchased

No

110

Each

9,564.000

36

108

DAS

41

9-89

14-9-20

NAS1149FN832P

Washer

Location

Loc Qty

Loc Code

ST295

430

123185

30

123522

400

st510

9134

125268

9134

108

MS21042L08

Purchased

No

110

Each

5,144.000

18

54

DAS

41

9-89

14-9-20

MS21042L08

Nut

Location

Loc Qty

Loc Code

ST314

3211

123900

58

m128401

1500

m128429

1653

ST508

1834

125445

436

m127410

1398

54

ST509

99

m127304

99

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Work Order ID: 120672

120672

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 6/10/14

Required Date: 6/11/14

Start Qty: 3.00

Required Qty: 3.00

NAS1149F0332P

Purchased

No

110

Each

4,804.000

6

18

DAS

41

9-89

14-9-22

NAS1149F0332P

Washer

Location

Loc Qty

Loc Code

GA

205

122063

205

ST295

1949

123900

12

m123185

34

m128401

1903

ST510a

2632

125646

132

m127831

2500

18

ST522

18

m123185

18

AN3-12A

Purchased

No

110

Each

47.0000

2

6

DAS

41

9-89

14-9-22

AN3-12A

Bolt

Location

Loc Qty

Loc Code

ST351

45

m128398

38

m128687

7

ST511

2

m125709

2

26

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Work Order ID: 120672

120672

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 6/10/14

Required Date: 6/11/14

Start Qty: 3.00

Required Qty: 3.00

MS21042L3

Purchased

No

110

Each

6,016.000

3

9

DAS

41

9-89 14-9-22

MS21042L3

Nut

Location

Loc Qty

Loc Code

ST314

109

108816

9

M127410

13

M127831

39

M128401

48

ST506

955

123900

955

ST509

4952

M127831

2

M128754

4950

9

MS27039-08-19

Purchased

No

110

Each

2,050.000

18

54

DAS

41

9-89 14-9-20

MS27039-08-19

Screw

Location

Loc Qty

Loc Code

ST506

2050

124309

648

125654

127

m127410

275

m127904

1000

54

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Work Order ID: 120672

120672

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 6/10/14

Required Date: 6/11/14

Start Qty: 3.00

Required Qty: 3.00

AN3-14A

Purchased

No

110

Each

225.0000

1

3

AN3-14A

Bolt

DAS

41

9.89

14-9-22

Location

Loc Qty

Loc Code

ST351

50

m127044

7

m128978

43

ST511

175

m127815

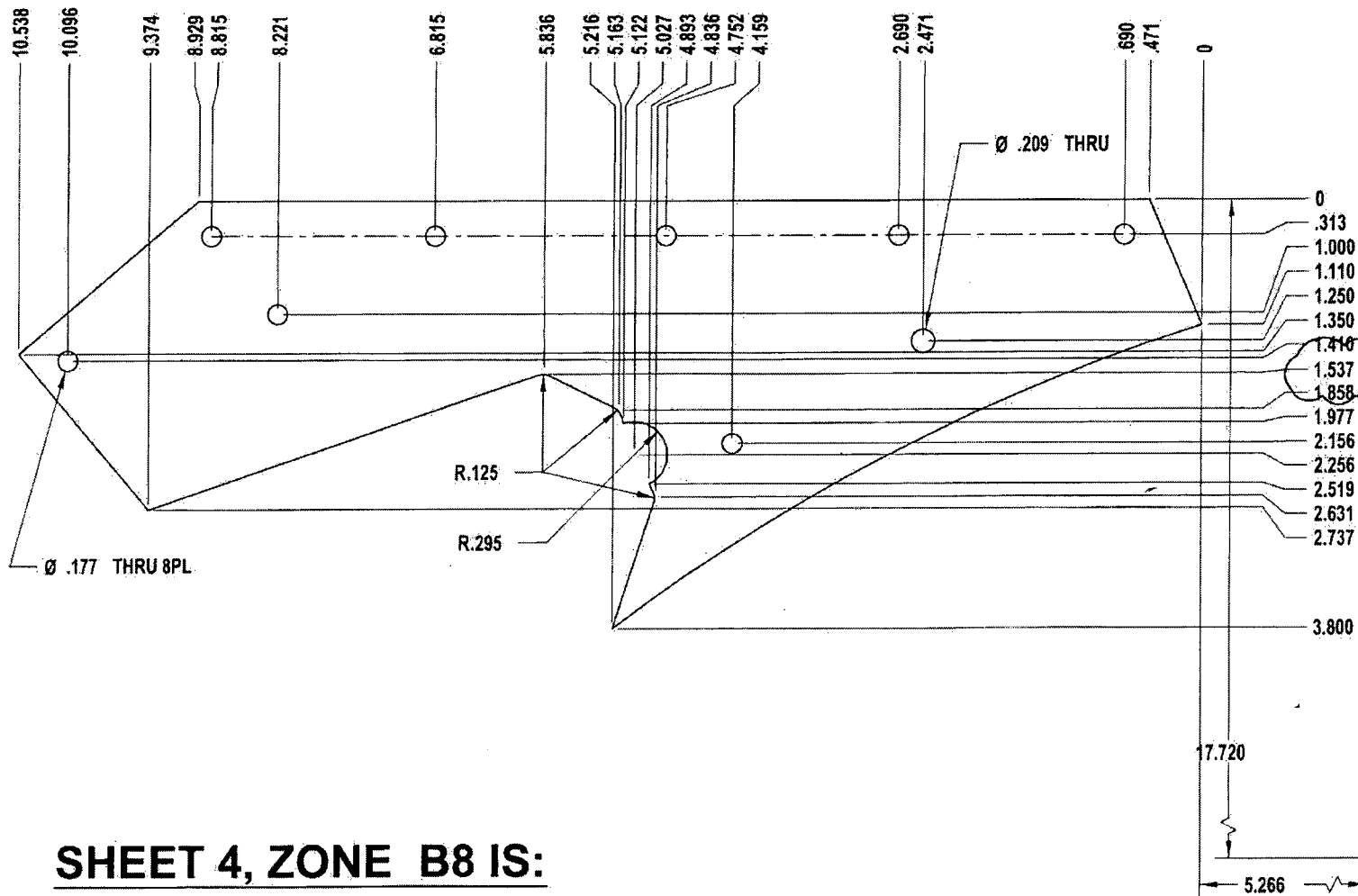
75

m128813

100

3

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03724				SHEET 1 OF 1	
	DWG NO. 646.3300	REV: N/C	PREPARED BY B. PETERS	DATE: 12/05/12	EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.	
	DWG TITLE: UPPER CUTTER ASSY					
APPROVED BY: ENGR <i>[Signature]</i>		MFG <i>[Signature]</i>		QC <i>[Signature]</i>	EFF: NEXT ORDER	
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: REVISED ORDINATE DIMENSION.				ECR: D-12-025



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 120672 ML5
1406-10

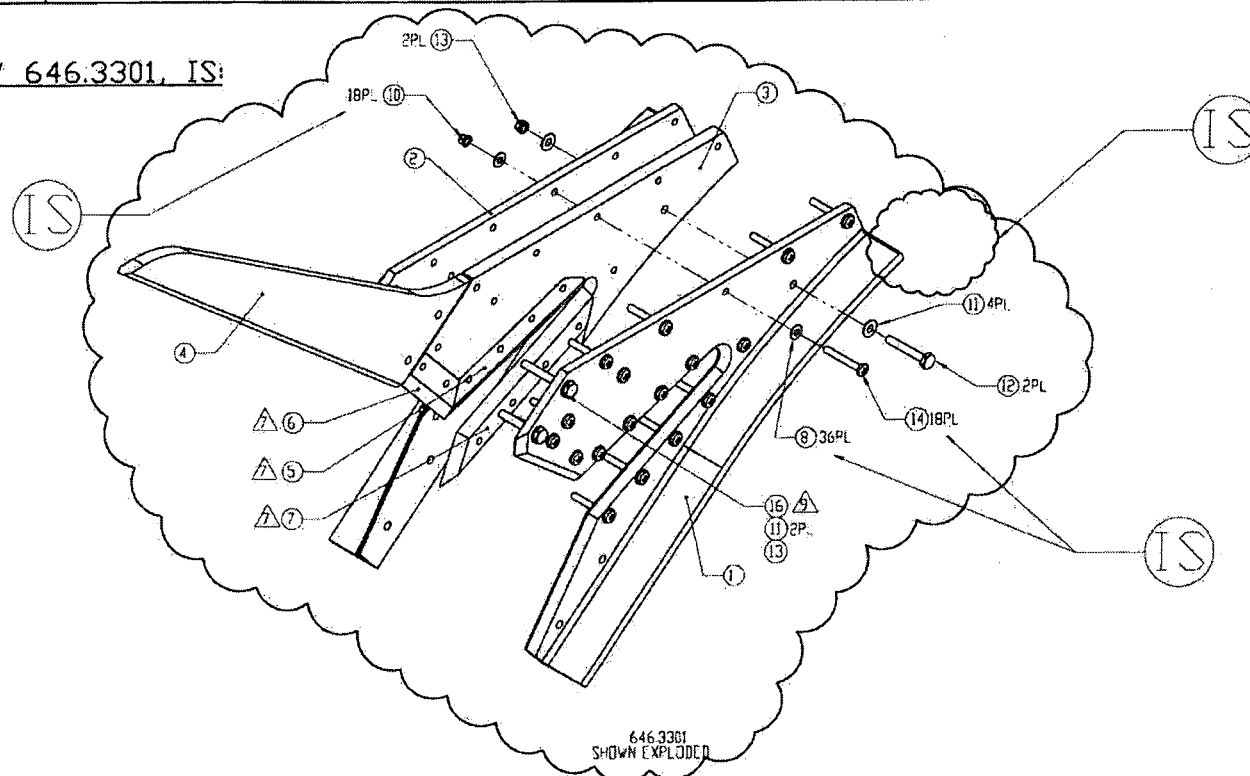
SHEET 4, ZONE B8 IS:

DOCUMENTS EFFECTED:	<input type="checkbox"/> RFMS <input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRU <input type="checkbox"/> ICA <input type="checkbox"/> BOM	CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
---------------------	--	---	--

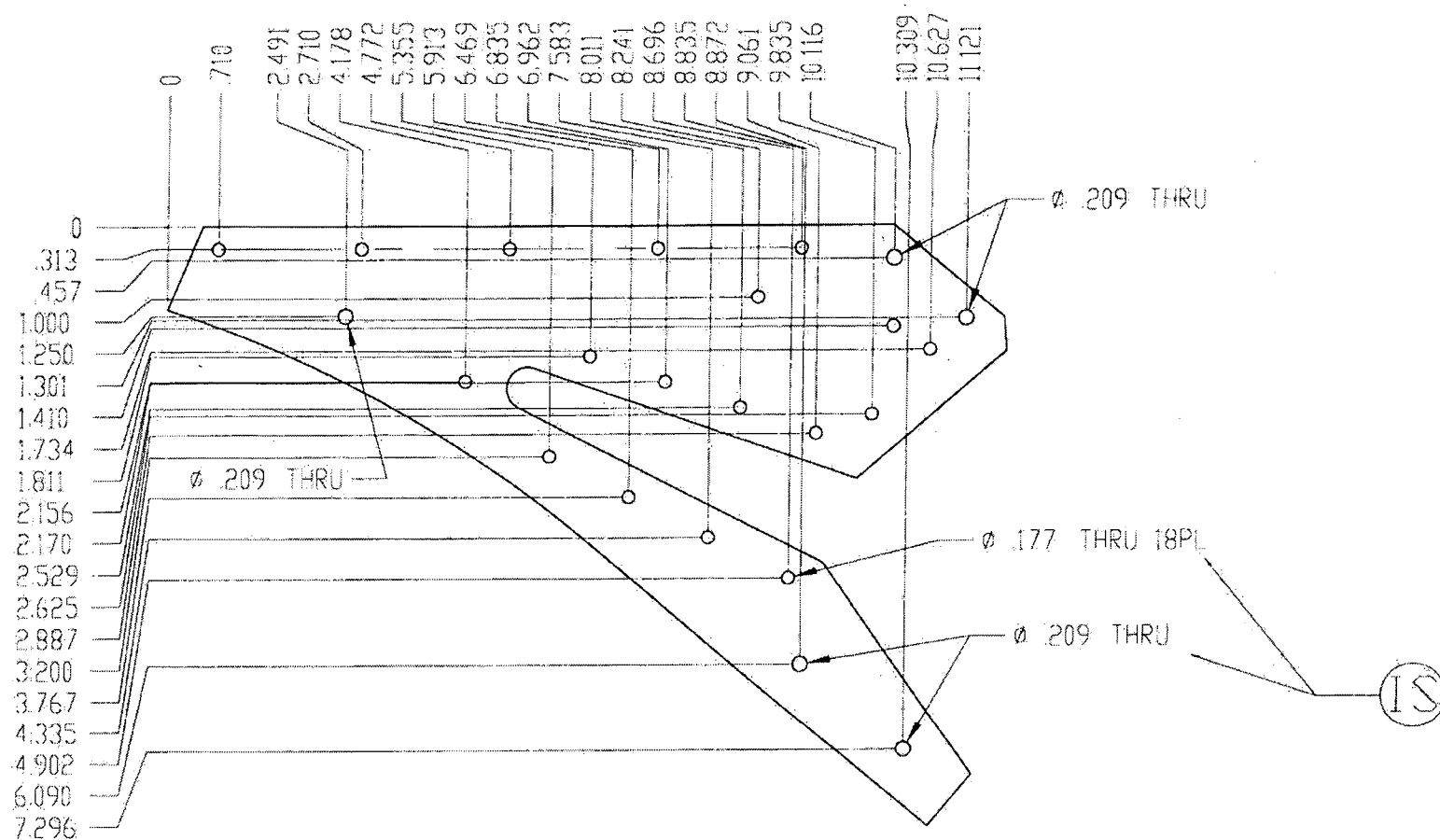
APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.		02196		SHEET 1 OF 2	
DWG NO.	646.3300	REV:N/C	PREPARED BY	S. HUFF	DATE: 01/05/09
DWG TITLE:		UPPER CUTTER ASSY			
APPROVED BY:	ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC	588	EFF: NEXT ORDER
TRANSACTION CODES (TC) A-ADD C-CREATE R-REVISE D-DELETE		REASON: REMOVED RIVETS IN FAVOR OF ADDITIONAL SCREWS			
		EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.			

SHEET 1, VIEW 646.3301, IS:



14	R	601.2765		18	SCREW	MS27039-0819
10	R	601.1541		18	LOCKNUT	MS21042L08
9	D	601.2766		3	RIVET	MS20470AD5-18
8	R	601.2764		36	WASHER	NAS1149FN832P
				.3301		
F/N	TC	PART NUMBER	QTY	DESCRIPTION		MATERIAL/SPECIFICATION
DOCUMENTS EFFECTED:						CHANGE CATEGORY
<input type="checkbox"/> MDL <input checked="" type="checkbox"/> INSTALL INSTRU <input checked="" type="checkbox"/> ICA <input type="checkbox"/> FMS <input checked="" type="checkbox"/> BOM						DER REVIEW REQUIRED
						<input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR
						<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

SHEET 3, SECTION VIEW A-A, IS:

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

REVISION			
REV.	DISCUSSION	DATE	APPROVE



02196, 03724

① MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12

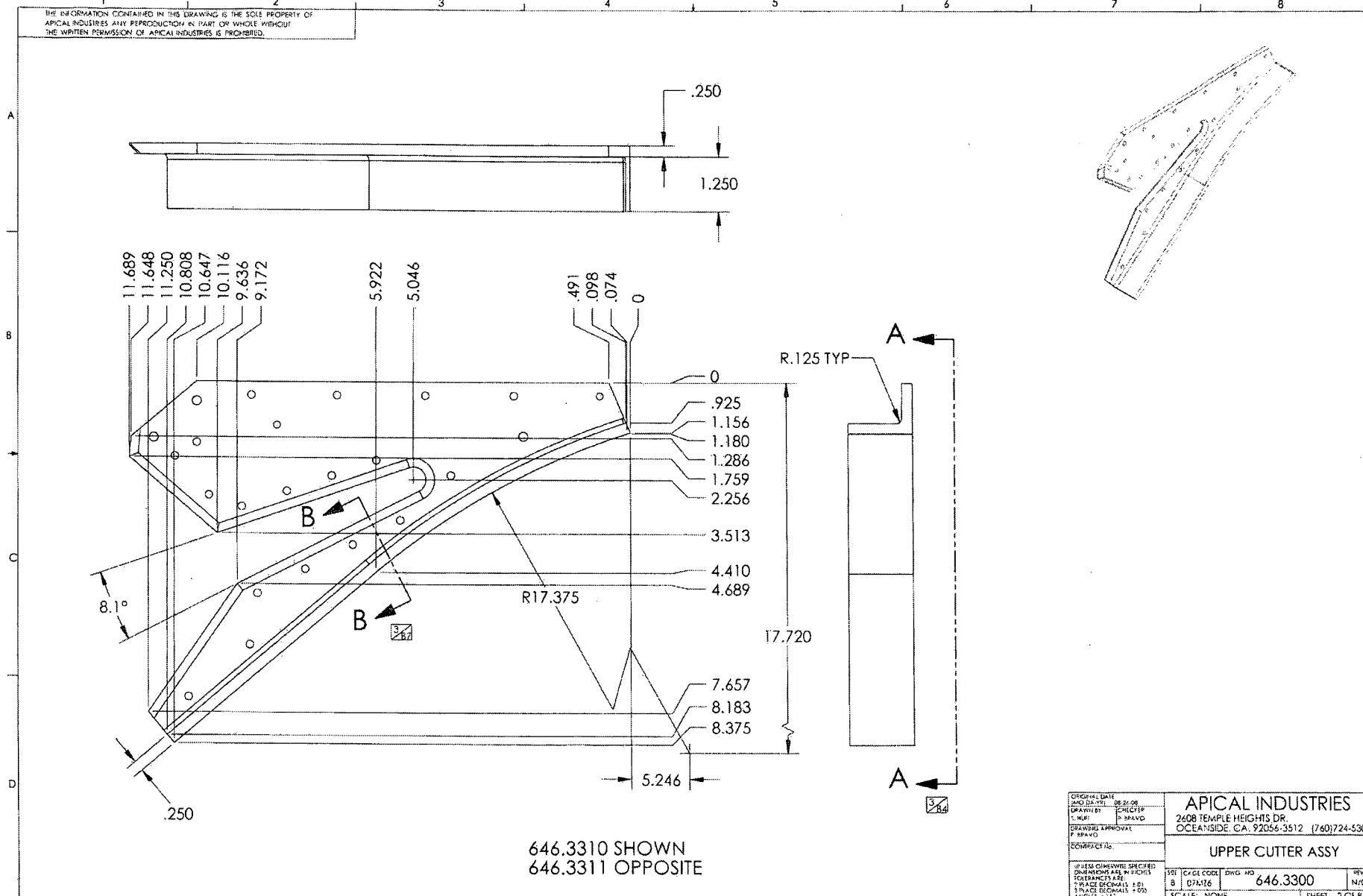
② FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III,
CLASS 2, COLOR BLACK;
CARDINAL 4860-50 PRETREATMENT PRIMER
PRIME IAW MIL-P-23377, TYPE I CLASS N

③ MATERIAL: AISI A2 TOOL STEEL
CONDITION: ANNEALED
POST PROCESS: HEAT TREAT TO 58-62 Rc ROCKWELL HARDNESS

4. FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N
5. DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED
6. IDENTIFY IAW MPP-120
7. APPLY F/N 15 AS REQUIRED TO ALL FAYING SURFACES OF F/N 5, 6 & 7 UPON ASSEMBLY
8. CUTTING EDGE INTENDED TO BE SHARP. DO NOT BREAK SHARP EDGE
9. INSTALL FASTENER FINGER-TIGHT

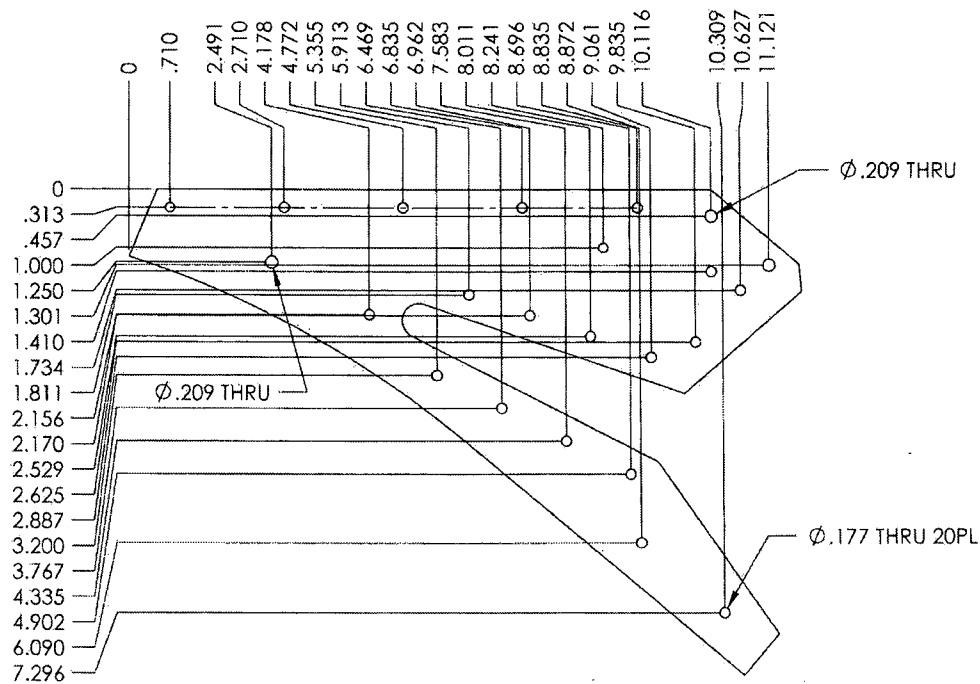
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ORIGINAL DATE AND BY: 08-21-98 UPDATED: 08-21-98 1. MUE DRAWING APPROVAL P. BRAYD CHECKED BY:		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, GA. 31305-3512 (760)724-5300	
IF ITEM DIMENSIONS SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. PLACE DECIMALS + .01 2. PLACE DECIMALS + .005 3. PLACE DECIMALS + .001 4. ANGLES ± .5°		101 CYCLE CODE B 07/11/16	DWG NO. 646.3300 SCALE: NONE
		REV. N/C	SHEET 2 OF 8

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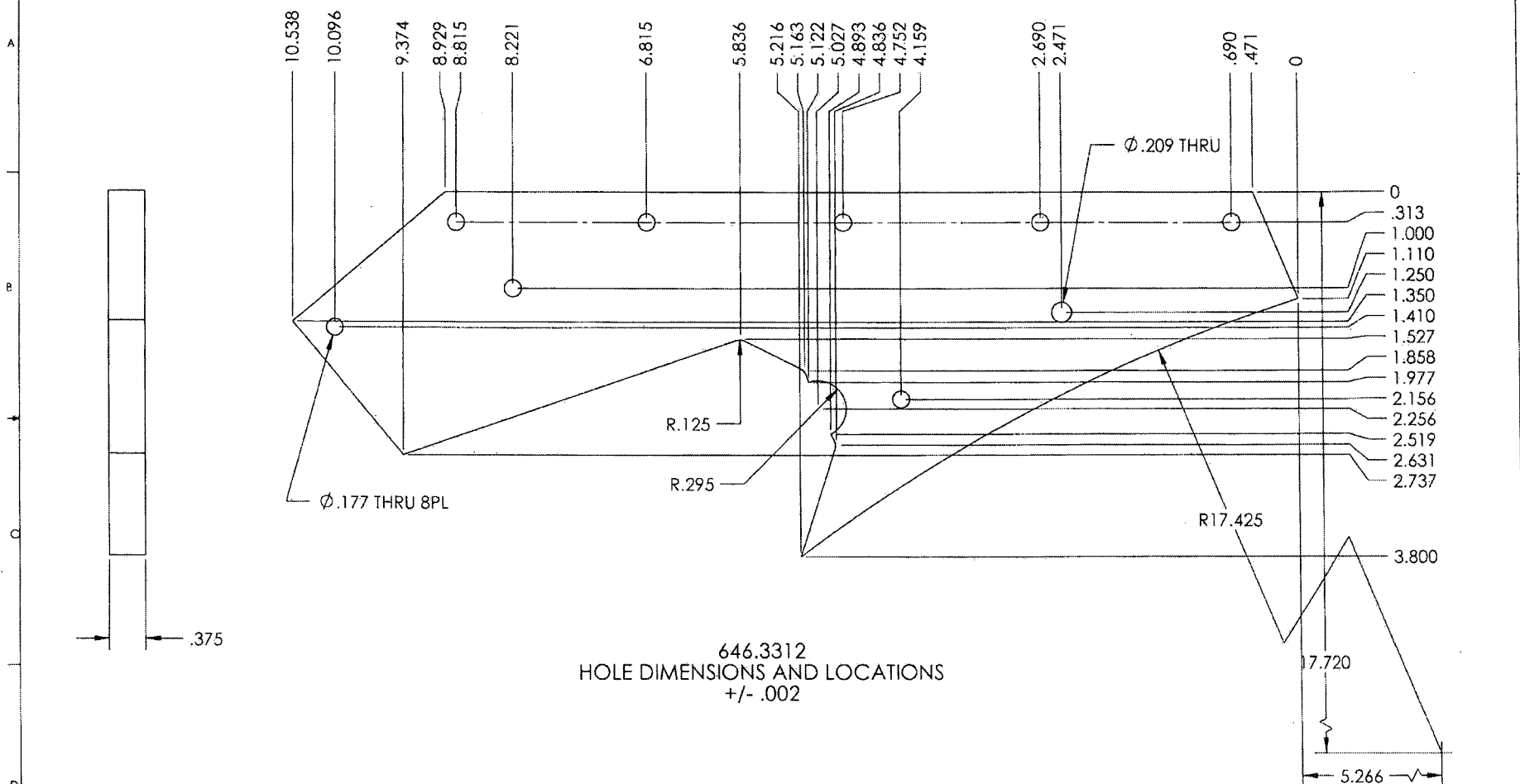
SECTION A-A

SECTION B-B

ORIGINAL DATE REV. DATE		APICAL INDUSTRIES	
20-24-00		2608 TEMPLE HEIGHTS DR.	
1. HWT		OCEANSIDE, CA. 92056-3512 (760)724-5300	
2. HWT		UPPER CUTTER ASSY	
3. HWT		SEE CATALOG	
4. HWT		B 07M16	
5. HWT		646.3300	
6. HWT		SCALE NONE	
7. HWT		SHEET 3 OF 8	

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REV.	DESCRIPTION	DATE	APPROVED

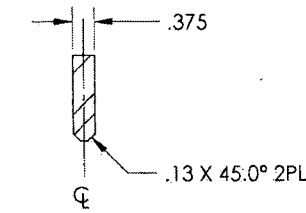
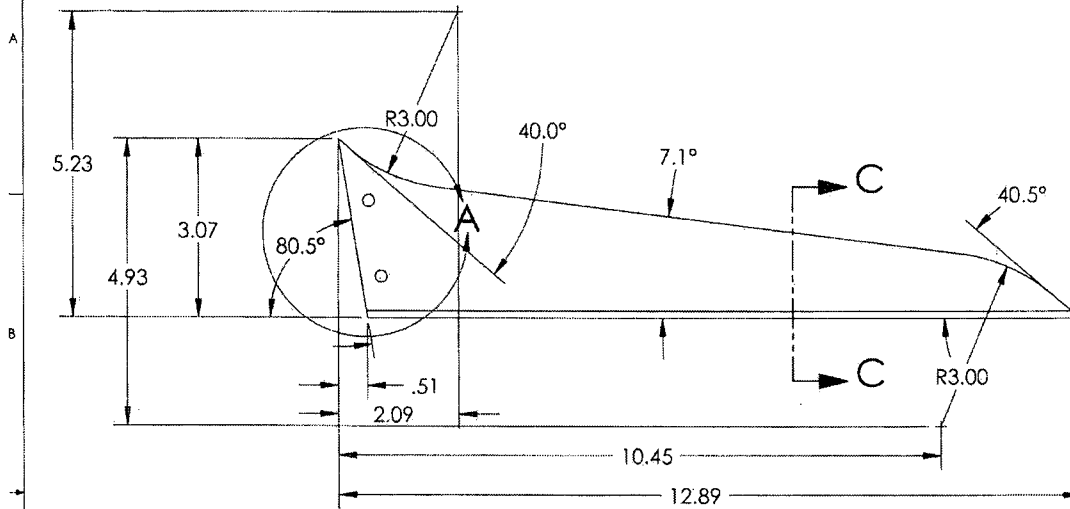


646.3312
HOLE DIMENSIONS AND LOCATIONS
+/- .002

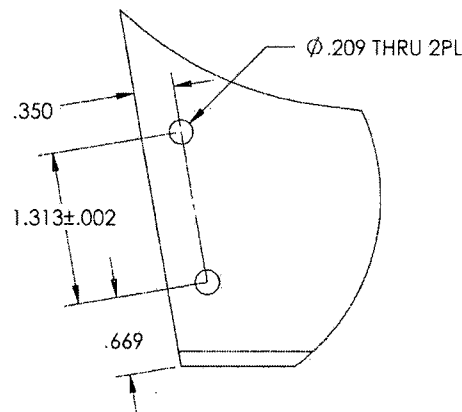
ORIGINAL DATE 08-24-09	APICAL INDUSTRIES	
DRAWN BY S. HUI	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED BY P. BRAVO	UPPER CUTTER ASSY	
DRAWING APPROVAL BY APICAL INDUSTRIES	REV. 8	DATE 07/20/12
CONTRACT NO.	DWG. NO. 646.3300	REV. N/C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ±.015 ANGLES ±.5°	SCALE NONE	SHEET 4 OF 8

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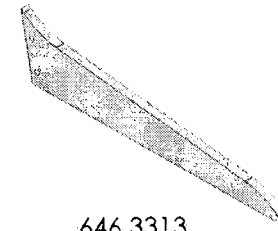
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



SECTION C-C



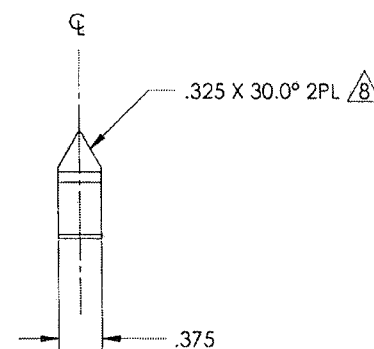
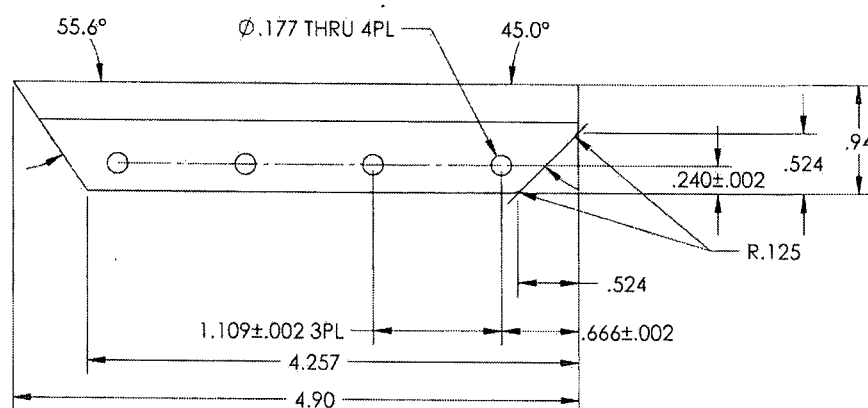
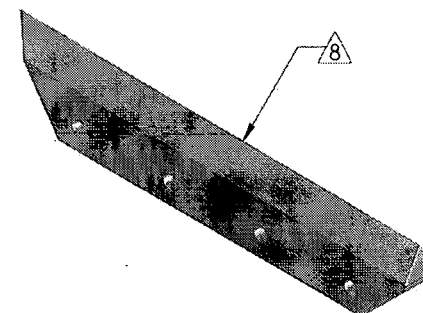
DETAIL A



646.3313

ORIGINAL DATE DATE CHG. BY DESIGNED BY S. HITE DRAWING APPROVAL P. SPANO CHECKED NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 2 PLACE DECIMALS ± .01 ANGLES ± .5°		DATE CHG. CODE B 07/02/06	INCH 646.3300 SCALE NONE
SHEET 5 OF 8		UPPER CUTTER ASSY	

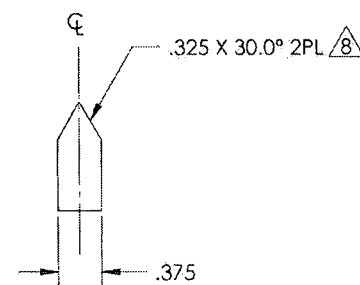
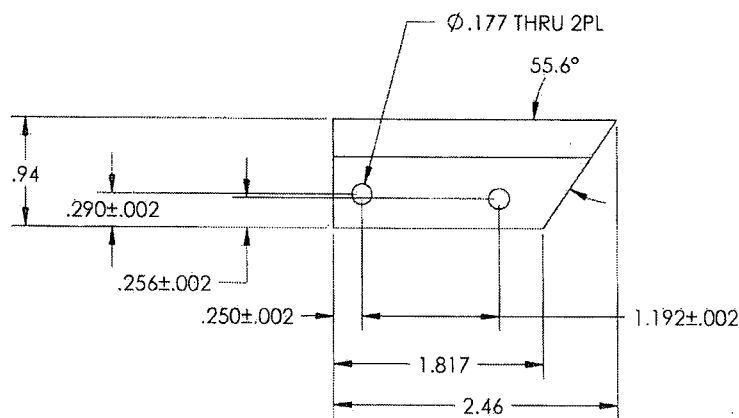
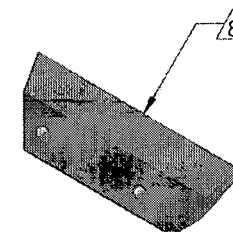
REVISIONS			
REV	DESCRIPTION	DATE	APPROVAL



ORIGINAL DATE (M/C/D-Y)		APR 26-08		
DEPARTS BY	CHECKED BY	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300		
BY TRUCK	BY TRUCK			
ORDERING APPROVAL BY SIGNATURE OF SALES COORDINATOR		UPPER CUTTER ASSY		
UNLESS OTHERWISE SPECIFIED DRAWING ARE FINISHES UNLESS APPEAR 1. PLACES DIMENSIONS 401 2. PLACES DIMENSIONS 1.503		SET B SCALE NONE	CAD CODE 07/26/08 DWG. NO. 646.3300	REV N/C 1 OF 1

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REV	DESCRIPTION	DATE	APPROVED

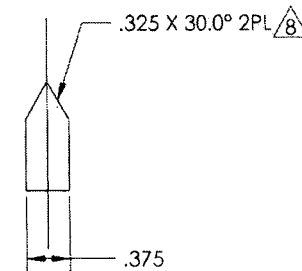
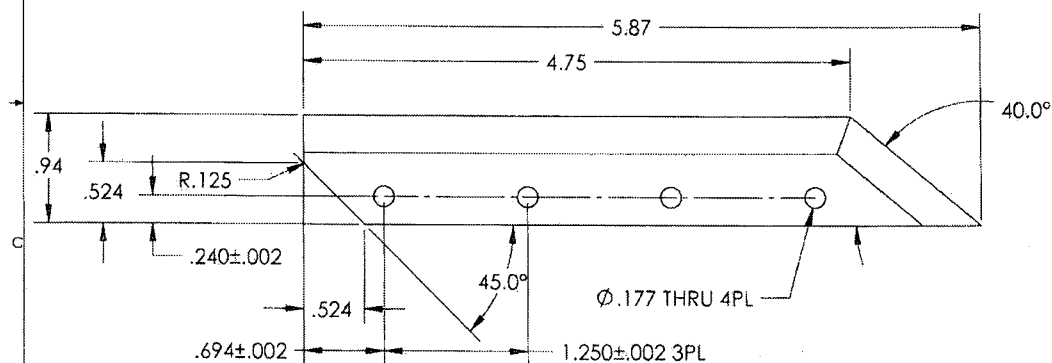


646.3315

ORIGINAL DATE INC-DIA-151 08-26-00		APICAL INDUSTRIES	
DRAWN BY S. HUI	CHECKED P. BRAVO	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL P. BRAVO		UPPER CUTTER ASSY	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ±.01 DECIMALS DECIMALS ±.003 ANGLES ±.5°		REV 3	DATE 07/12/06
SCALE NONE		QTY. REQ. 646.3300	REV. N/C
SHEET 7 OF 8		SHEET 7 OF 8	

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



646.3316

ORIGINAL DATE 10/20/16 BY: JMS CHECKED: JMS DRAWING APPROVAL BY: JMS DATE: 10/20/16		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UPPER CUTTER ASSY		646.3300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SCALE: NONE	SHEET 8 OF 8